

# ENVIRONMENTAL ASSESSMENT and FINDING OF NO SIGNIFICANT IMPACT For the Reallocation of Refuge Water Supply from North of Delta Refuges to South of Delta Refuges

Prepared by the Bureau of Reclamation October 2008

U. S. Department of the Interior Bureau of Reclamation Mid-Pacific Region Sacramento, California

# FINDING OF NO SIGNIFICANT IMPACT

Water Reallocation by North of Delta Refuges
to South of Delta Refuges

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The proposed action by Reclamation is to reallocate existing refuge water supplies currently assigned to the Sacramento and Sutter National Wildlife Refuges (NWR) for delivery to South of Delta Refuges, specifically Kern NWR, Grasslands Water District/Resource Conservation District and other state managed wildlife areas. The water supply would augment wildlife habitat/refuges south of the Delta.

#### **FINDINGS**

Reclamation has prepared an environmental assessment (EA) (see attached) that analyzes the impacts anticipated from the proposed action. Based on the analysis in the EA and in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), the Mid -Pacific Regional Office of the Bureau of Reclamation (Reclamation) has found that proposed action, reallocation of water from north of Delta refuges to south of Delta refuges would not significantly affect the quality of the human environment. Therefore, an environmental impact statement is not required.

## This Finding of No Significant Impact is based upon the following:

- 1. A surface water reallocation action is permitted under the Refuge Water Supply Contracts in Article 7. The proposed action would occur in October, November, and December 2008 would not significantly affect surface water resources for the refuges providing the water.
- 2. The proposed action involves up to 16,000 acre feet of water. When compared to the overall water supplies for the refuges and the entire Central Valley Project (CVP), that is a minimal amount of water. The proposed action is not reducing refuge water supply. The proposed action simply changes the ultimate delivery location of refuge water supply. There are no changes to CVP facilities, Shasta operations or Jones Pumping Plant. The proposed action provides an overall beneficial effect to the water supplies of the south of Delta refuges.
- 3. There would be no effect to Delta smelt, winter-run Chinook salmon, spring-run Chinook salmon, steelhead, or green sturgeon or other listed species as a result of either the no action alternative or the proposed action since operations and river flows would remain the same.
- 4. The reallocated water would allow for additional seasonal wetlands in the San Joaquin Valley. The north of Delta refuges would not be significantly affected by reducing their water supply during October, November and December 2008.
- 5. This action has no potential to affect historic prposerties (36 CFR Part 800.3 [a][1]) since there is no construction proposed and no new lands would receive this water. Therefore, the proposed action would not affect cultural resources.
- 6. The proposed action would not affect any Indian Trust Assets. The proposed action would not result in any ground-breaking activities affecting any Indian reservations, rancherias, or other legal interests held in trust by the United States for the benefit of Indian Tribes or individual Indians.
- 7. The proposed action would not disproportionately affect minorities or low-income populations and communities because there would be no change in land management and there would not be significant adverse human health or environmental effects.

## BACKGROUND AND PURPOSE AND NEED

The Central Valley Project Improvement Act (CVPIA) Title XXXIV Section 3406(b)(3) directs the Secretary of Interior, to operate the Central Valley Project to meet all obligations under State and Federal law, including but not limited to the Federal Endangered Species Act, 16 U.S.C. s 1531, et seq., and all decisions of the California State Water Resources Control Board, establishing licenses and permits for the project. The Secretary, in consultation with other State and Federal Agencies, Indian tribes, and affected interests is further authorized and directed to: "develop and implement a program for the acquisition of a water supply to supplement the quantity of water dedicated to fish and wildlife purposes..."

The purpose for this federal action is to acquire an additional water supply for wildlife habitat/refuges south of the Delta through reallocation of CVPIA refuge water supply. The south of Delta refuges are currently served by Reclamation through the actions of the Refuge Water Supply Program (CVPIA Title XXXIV Section 3406(d)(paragraphs 1-5).

The current hydrologic crisis in California has had a severe impact upon managed wetland complexes throughout the state. This is especially true in the San Joaquin Valley, where a second below-normal year of runoff, poor water quality, pumping restrictions in moving water south of the Delta, and severe CVPIA budget constraints have all contributed to limit the amount Incremental Level 4 refuge water available to adequately provide critical habitat for wildlife.

## **NO ACTION**

Under the no action alternative, the United States Bureau of Reclamation (Reclamation) would not reallocate up to 16,000 acre feet (AF) of north of Delta refuge water supply to augment south of Delta refuge water supply. It is unlikely that South of Delta refuges could potentially acquire Level 4 water from other sources in order to maintain wildlife habitat. There would be 2,100 acres of managed seasonal wetland units that would not be flooded without this additional water, resulting in less habitat value for certain waterfowl groups this fall and winter.

# **PROPOSED ACTION**

Reclamation proposes to reallocate water currently assigned to the Sacramento and Sutter National Wildlife Refuges (NOD Refuges). The NOD Refuges would make water available by revising their water management plans 2008, thereby freeing up a portion of their water supply to help south of Delta refuges maintain wildlife habitat.

The water would be delivered to and used by, certain south of Delta refuges, pursuant to Article 7 of Reclamation's Refuge Water Supply Agreements with US Fish and Wildlife Service (FWS), California State Department of Fish and Game (DFG) and the Grassland Water District. The proposed reallocation action involves up to 16,000 AF of water currently allocated to NOD Refuges to be provided as incremental Level 4 water to the Kern National Wildlife Refuge, Grassland Water District/Grassland Resource Conservation District, and the refuges owned and

operated by the State of California through the DFG south of the Delta.

Reclamation, with the support of the NOD refuges would incrementally transport the water via the Sacramento River south in October, November and December of 2008, for use by refuges in the San Joaquin Valley. Refuge Water Supply Program managers and CVPIA refuge staff consider this action to be the most efficient use of overall refuge water supply, given California's current hydrologic crisis and on-going CVPIA budget constraints.

Water normally used by the NOD refuges would be allowed to flow down the Sacramento River to the Delta. The water would be pumped from the Delta at Jones Pumping Plant with available capacity and Project Use Energy at Jones Pumping Plant in October, November and December of 2008. The amounts to be delivered would 5,333 AF in October, while the actual November and December amounts would depend upon NOD refuge management decisions and Delta conditions. The water would be delivered directly to the specified refuges. Delivery of refuge water supply in the San Joaquin Valley would utilize existing conveyance facilities.

The actual volume to be reallocated would be at the discretion of the staff of Sacramento National Wildlife Refuge Complex but would not exceed 16,000 acre-feet. Specifically the request is to reallocate and convey:

- Up to 5,000 acre-feet of Level 2 supply from Sacramento National Wildlife Refuge;
- Up to 7,000 acre-feet of Level 2 supply from Sutter National Wildlife Refuge;
- Up to 4,000 acre-feet of CVP water permanently acquired in 1998 by assignment from Corning, Thomes and Proberta Water Districts as Incremental Level 4 supply.

## AFFECTED ENVIRONMENT/ ENVIRONMENTAL CONSEQUENCES

The affected environment includes the Sacramento-San Joaquin Delta. There are activities associated with the proposed action that have been covered in previous environmental documents. These include the Central Valley Project Improvement Act (CVPIA) Final Programmatic Environmental Impact Statement (PEIS) October 1999; Final NEPA Environmental Assessment and CEQA Initial Study Refuge Water Supply Long-Term Water Supply Agreements, Sacramento River Basin January 2001; San Joaquin Basin Action Plan and North Grasslands Area Conveyance Facilities Final Environmental Assessment/Initial Study December 1997; Conveyance of Refuge Water Supply Environmental Assessment and Initial Study, South San Joaquin Valley Study Area, Kern National Wildlife Refuge, Pixley National Wildlife Refuge, October 2003; Final Environmental Assessment/Initial Study Finding of No Significant Impact/Negative Declaration for the Acquisition of Water from the Corning, Proberta, and Thomes Creek Water Districts April 1998.

The analysis in this environmental assessment tiers from the CVPIA PEIS analysis of refuge water supply.

## **Surface Water**

#### **Affected Environment**

The affected environment is the mainstem of the Sacramento River and the Delta.

The pumping of the water down the Sacramento River and across the Delta would be subject to all State and Federal environmental regulations and agreements governing CVP and SWP operations. Some of these regulations are cited in Table 1.

Table 1. Regulations and Agreements Affecting Water Management in the Delta

Law or Directive	Year	Description
Coordinated Operating Agreement	1986	Agreement between the State of California and the Federal Government. Determined the respective water supplies of the CVP and SWP while allowing for a negotiated sharing of Sacramento-San Joaquin Delta excess outflows and the satisfaction of in-basin obligations between the two projects.
SWRCB Revised Water Right Decision 1641	2000	Revised order to provide for operations of the CVP and SWP to protect Bay-Delta water quality.
Biological Opinion on Effects of Proposed Long-Term Operations, Criteria and Plan (OCAP) for the CVP and the State Water Project, October 22, 2004, for Sacramento River Winter-run Chinook Salmon, Central Valley Spring- run Chinook Salmon, and Central Valley Steelhead	2004	Non-jeopardy biological opinion issued by the National Marine Fisheries Service determining that Project operations, as described in the OCAP, are not likely to jeopardize the continued existence of Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead.
Biological Opinion for Delta Smelt on the Revised CVP/SWP Operating Plan	2005	Non-jeopardy biological opinion issued by the Service with regard to impacts on the threatened Delta smelt of the proposed revised operations of the CVP and the State Water Project.

These regulations and agreements generally drive the magnitude of releases from Shasta Lake and limit the volume of water that can be exported from the Delta based on Delta hydrodynamics, water quality, and potential effects on fisheries as determined by fish population monitoring at the pumps.

## **Environmental Consequences**

The proposed action would result in no substantial change in Central Valley Project (CVP) or State Water Project (SWP) operations, including Delta pumping, as these are governed by a series of regulations and agreements with the State Water Resources Control Board (SWRCB), the United State Fish and Wildlife Service, the National Marine Fisheries Service, and the DFG, as well as CVP contractual obligations. The monthly releases in October, November, and December by the NOD refuges would not cause increases in the amount of water released from Shasta. On average, the water would be released over a two week period/month and it is unlikely that the amount would exceed 500 cubic feet per second (cfs)/day. This is about 8 percent of current daily Shasta releases. This amount of water to be released would be consistent with current Shasta operations, meaning Shasta would not increase releases. The reallocation would be included in the current releases at Shasta, which is 6,500 cfs. Therefore, no change in releases or flows would occur when compared to the no action.

The water to be reallocated would be pumped across the Delta to be delivered to San Joaquin Valley wildlife refuges using existing conveyance and storage facilities.

Given the existing environmental constraints and regulatory limitations on Delta export pumping operations and the small change this reallocation would represent relative to the total releases from Shasta Lake, the proposed action would have negligible effects on water quality or water flows in the Sacramento River and the Delta.

The no action alternative would have no effect on surface water in the Sacramento River and the Delta.

#### **Cumulative Effects**

Since changes to surface water supply are minimal and would occur between October and December 2008, the proposed action would not contribute to cumulative effects to surface water resources. A full analysis of refuge water supply was completed in the CVPIA Programmatic Environmental Impact Statement, October 1999.

# **Biological Resources**

#### **Affected Environment**

## **Fisheries**

The Delta is the tidal confluence of the Sacramento and San Joaquin Rivers from the Carquinez Straits to the mouth of the American River in the north, and to Vernalis on the San Joaquin River to the south. All anadromous fish of the Central Valley migrate through the Delta or spawn in, rear in, or are dependent on the Delta for some critical part of their life cycle. In addition, the Delta smelt is a federally listed resident species found in the Delta. The central valley spring-run

Chinook salmon, central valley winter run Chinook salmon, central valley steelhead and green sturgeon are also federally listed species found in the Delta and the Sacramento River.

A variety of warm and cold-water fish species are found throughout the Sacramento Valley system, including several anadromous species. The natural anadromous fishery in the Sacramento River is supplemented with hatchery produced fall, late fall-run Chinook salmon and steelhead from the Coleman National Fish Hatchery; winter-run Chinook salmon from the Livingston Stone Fish Hatchery; and fall- and spring-run Chinook salmon and steelhead from the Feather River Hatchery. Striped bass are also stocked by the DFG in the lower Sacramento-San Joaquin River Delta. Other anadromous fish species in these rivers include steelhead trout, white and green sturgeon, striped bass, American shad, Pacific lamprey, and river lamprey.

Common native Sacramento Valley fish include resident rainbow trout, hardhead, hitch, Sacramento squawfish, California roach, speckled dace, Sacramento sucker, three-spine stickleback, and riffle sculpin. Introduced fish in the Sacramento Valley rivers include carp; goldfish; channel and white catfish; yellow, black, and brown bullheads; mosquito fish; and various sunfish; crappie; smallmouth and largemouth basses. Many of these nonnative species have displaced native fish throughout the Sacramento River.

## Wildlife at North of Delta Refuges

The affected environment includes the Sacramento and Sutter National Wildlife Refuges (NWR). Sacramento NWR contains 10, 819 acres of seasonal marsh, permanent ponds, and uplands in the heart of the Sacramento Valley. Sutter NWR contains 2,591 acres of seasonal marsh, permanent ponds, and uplands. Specific details on wildlife resources at the Sacramento and Sutter NWR were analyzed in Sacramento, Delevan, Colusa and Sutter National Wildlife Refuges Draft Comprehensive Conservation Plan July 2008.

## Wildlife at South of Delta Refuges

The affected environment includes the Kern NWR, Grasslands Water District/Resource Conservation District and other state managed wildlife areas. Specific details on wildlife resources at Kern NWR were analyzed in the *Kern and Pixley NWR Comprehensive Conservation Plan February 2005*.

#### **Environmental Consequences**

Neither the no action alternative nor the proposed action would noticeably affect fisheries populations or habitats in either the Sacramento River or the Delta because the effects on CVP operations would be negligible and would occur within the bounds of the guidelines set by existing biological opinions and agreements.

The volume of water associated with the proposed action is insignificant when compared to the flows in the Sacramento River. There would be no effect to Delta smelt, winter-run Chinook

salmon, spring-run Chinook salmon, steelhead, or green sturgeon or other listed species as a result of either the no action alternative or the proposed action since operations and river flows would remain the same.

Water released from Shasta Reservior would be consistent with flow objectives for the Sacramento-San Joaquin Delta, as it passes through the Delta. The proposed action would provide water for wildlife habitat at the south of Delta (SOD) refuges. Without the water, some wildlife habitat would remain dry and of little value.

Each refuge produces wildlife and habitat management plans for their activities. The refuges strive to provide optimal habitat for wildlife. The proposed action would provide much needed water to SOD refuges thereby, providing a benefit to wildlife. The NOD refuges would still be able to effectively manage wildlife habitat.

It is the determination of the management staff at the Sacramento and Sutter NWR that this water (which, if used, would supplement and maintain seasonal wetland units) would better serve the overall CVPIA refuge network by providing this water to the refuges in the San Joaquin Valley (South of Delta), where many wetland units would remain completely dry and of little value to waterfowl without applying additional water this fall and winter.

#### **Cumulative Effects**

Since there are no effects of the proposed action on fishery resources, the proposed action would not contribute to any cumulative adverse effects for this resource.

The proposed action would simply redistribute NOD refuge water supply to those SOD refuges for wildlife habitat. Use of the water would remain essentially the same, it would only be utilized in a different location. Therefore, the proposed action would not contribute to cumulative adverse effects.

## **Cultural Resources**

#### Affected Environment

Cultural resources is a term used to describe both 'archaeological sites' depicting evidence of past human use of the landscape and the 'built environment' which is represented in structures such as dams, roadways, and buildings. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation which outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (National Register). Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 CFR Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking will have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Office (SHPO), to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

The San Joaquin Valley is rich in historical and prehistoric cultural resources. Cultural resources in this area are generally prehistoric in nature and include remnants of native human populations that existed before European settlement. Prior to the 18th Century, many Native American tribes inhabited the Central Valley. It is possible that many cultural resources lie undiscovered across the valley. The San Joaquin Valley supported extensive populations of Native Americans, principally the Northern Valley Yokuts, in the prehistoric period. Cultural studies in the San Joaquin Valley have been limited. The conversion of land and intensive farming practices over the last century has probably destroyed many Native American cultural sites.

The CVP is being evaluated for the National Register of Historic Places (NRHP). The CVP includes the Delta-Mendota Canal (DMC), San Luis (B. F. Sisk) Dam, and the San Luis Canal. The DMC, completed in 1951, is part of the Delta Division of the CVP that carries water southeasterly from the Tracy Pumping Plant along the west side of the San Joaquin Valley for irrigation, for use in the San Luis Unit, and to replace San Joaquin River water stored at Friant Dam and used in the Friant-Kern and Madera systems. The DMC is being nominated to the NRHP as part of the CVP Multiple Property Listing under Criterion A for its significance under the theme of Development, Construction, and Operation of the CVP and its major role in transferring of water from the wetter Sacramento River Valley to the drier San Joaquin River Valley.

## **Environmental Consequences**

Under the No Action Alternative, there will be no impacts to historic properties since there would be no undertaking. Conditions related to historic properties would remain the same as exiting conditions.

Reallocating water as described in the proposed action is administrative in nature and will not result in physical changes to water conveyance features nor impacts to the ground. Therefore, the Proposed Action has no potential to affect historic properties pursuant to 36 CFR Part 800.3(a)(1).

#### **Cumulative Effects**

Since there are no effects to Cultural Resources, there would be no contribution to any

cumulative effects as result of implementing the proposed action.

## **Indian Trust Assets**

Indian Trust Assets (ITAs) are legal interests in property held in trust by the U.S. for federally-recognized Indian tribes or individual Indians. An Indian trust has three components: (1) the trustee, (2) the beneficiary, and (3) the trust asset. ITAs can include land, minerals, federally-reserved hunting and fishing rights, federally-reserved water rights, and in-stream flows associated with trust land. Beneficiaries of the Indian trust relationship are federally-recognized Indian tribes with trust land; the U.S. is the trustee. By definition, ITAs cannot be sold, leased, or otherwise encumbered without approval of the U.S. The characterization and application of the U.S. trust relationship have been defined by case law that interprets Congressional acts, executive orders, and historic treaty provisions.

Consistent with President William J. Clinton's 1994 memorandum, "Government-to-Government Relations with Native American Tribal Governments," Bureau of Reclamation (Reclamation) assesses the effect of its programs on tribal trust resources and federally-recognized tribal governments. Reclamation is tasked to actively engage federally-recognized tribal governments and consult with such tribes on government-to-government level (59 Federal Register 1994) when its actions affect ITAs. The U.S. Department of the Interior (DOI) Departmental Manual Part 512.2 ascribes the responsibility for ensuring protection of ITAs to the heads of bureaus and offices (DOI 1995). DOI is required to "protect and preserve Indian trust assets from loss, damage, unlawful alienation, waste, and depletion" (DOI 2000). Reclamation is responsible for assessing whether the proposed action has the potential to affect ITAs.

#### **Affected Environment**

Types of actions that could affect ITAs include an interference with the exercise of a reserved water right, degradation of water quality where there is a water right, impacts on fish and wildlife where there is hunting or fishing rights, or noise near a land asset where it adversely affects uses of the reserved land.

Approximately 11 reservations or rancherias are located in the counties that make up the San Joaquin River region. In addition, there are also a number of public-domain allotments with the region. The closest ITA to the proposed action is the Chicken Ranch Rancheria of Me-Wuk Indians of California. No other ITAs have been identified as part of the environmental setting for the proposed action.

## **Environmental Consequences**

The proposed action would not result in any ground-breaking activities affecting any Indian reservations, rancherias, or other legal interests held in trust by the United States for the benefit of Indian Tribes or individual Indians. Any increased flows would be within the normal operations of the affected Sacramento River and Delta and would not negatively affect any ITAs that are

nearby.

#### **Cumulative Effects**

Since there are no effects to ITAs, there would be no contribution to cumulative effects as a result of implementing the proposed action.

## **Environmental Justice**

Executive Order 12898 requires each Federal agency to achieve environmental justice as part of its mission, by identifying and addressing disproportionately high adverse human health or environmental effects, including social and economic effects, of its programs and activities on minority populations and low-income populations of the United States.

Environmental justice refers to the fair treatment of people of all races, income, and cultures with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental impacts resulting from the execution of environmental programs.

#### **Affected Environment**

The project areas in the Sacramento and San Joaquin Valley have a relatively high proportion of Hispanics; the per capita and median household incomes are all lower than the averages for the State. A portion of the housing is substandard and there is a reasonably high unemployment rate. Most of these people are migrant farm workers

## **Environmental Consequences**

There would be no changes in agricultural communities or practices resulting from the reallocation of this refuge water or the associated movement of the water across the Delta. Implementation of the proposed action would not alter employment opportunities or housing availability under either scenario. Therefore, the proposed action would not have any disproportionate impact on low-income or minority individuals. The no action alternative would likewise have no impact on environmental justice.

#### **Cumulative Effects**

Since there are no effects to low-income or minority individuals, there would be no contribution to cumulative effects as a result of implementing the proposed action

# CONSULTATION AND COORDINATION

Reclamation consulted and/or coordinated with the United States Fish and Wildlife Service, the Department of Fish and Game, the Grassland Water District and the National Marine Fisheries Service.

# **List of Preparers**

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